IT314: SOFTWARE ENGINEERING

Project Guidelines:

- You may propose any project from your side.
- You may suggest an application towards the SE project based-on your own interest considering the following themes.

Sl.	Project Theme	TA Name	TA Student
No.			ID
1	Healthcare Management System	Aman	202117001
2	Academics Management System	Kalgi	201721004
3	Data Analytics Platform	Anshul	202117003
4	Social media app like Instagram, Facebook	Harshal	202111017
5	Financial Management System	Jash	202011070
6	Food based app like Zomato, Swiggy	Vaishnavi	202111051
7	OTT platform like Neflix, Hotstar	Dhara	202111054
8	E-commerce	Devanshi	202011060
9	Expense Mgmt. System like Splitwise	Pinak	202111063
10	Hotel/Restaurant Automation System	Mahir	202011002
11	Secure Chat Platform	Kavan	202111007
12	Election Management System	Nimmi	202011016

- You will have to submit a 1-2 pages project proposal (Deadline: March 5) clearly specifying,
 - o project title,
 - o group members with roll numbers,
 - o system description, and
 - o development technology/platform/stack etc.
- This is a group assignment. The groups have already been formed, and those groups of 4-6 students will be carrying out this software project assignment.
- Any submitted documents towards this project assignment should be put under version control.
- All documents including the implementation code should be maintained in a GitHub repository.
- The following documents are part of submission for this project assignment.
 - Project Detail Document (PDD)
 - Timesheet (Template will be given)
 - o Weekly Status Report (WSR)
 - Project Management Document (PMD)
- The details on each of the above document will be shared in a separate document.
- In case you find any terms in this document which are new and they are not introduced to you till now either in theory class or lab sessions, do not worry.
 - For all such details, you may just indicate that relevant project details will be submitted / updated in the upcoming version of that particular document.

Project Detail Document

Date of submission: 15-03-2022 Mode of Preparation: Group Submitted to: Upload to Google Classroom

The following details should be included in your project detail/proposal document.

- 1. Title of your Group Project
- 2. Team members (Name & Roll Number)
- 3. Name of the reporting TA
- 4. Date
- 5. Version number
- 6. Start Date: 28-02-2022, End Date: 13-05-2022 (Approx. 11 weeks)
- 7. Objectives of the Project
- 8. Functionalities (briefly, maximum limit is two pages)
- 9. Project Deliverables
 - (a) Milestones (with intermediate milestones at two weeks)
 - (b) List of final deliverables
 - i. Complete documentation (internal included)
 - ii. Report for audit
 - iii. User guide (includes deployment guide, end user guide etc.)
- 10. Estimated total time (unit: hours) (Please specify a breakdown of different project activities)
- 11. H/W and S/W requirements (attach a separate document, if necessary)
- 12. Technology / Architecture (attach a separate document, if necessary)
- 13. Standard to be followed throughout the project (team need to fix a standard and follow the conventions recommended).

Above details should be submitted as an extension to the proposal document and its corresponding pdf file should be named using the following naming convention for submission.

If group comprises of students with Roll Nos. 10, 25, and 105, file name should be pdd-10-25-105.pdf

Time Sheet

Submission: Weekly.

Date of Submission: Every Friday till End of Project. **Mode of Preparation:** Individual and on daily basis.

Structure: Please use the provided template. **Submitted to:** Upload to Google Classroom

- 1. Date of Preparation: On daily basis
- 2. Title of your Group Project
- 3. Roll No.
- 4. Name of the Student
- 5. Activity code (generic)
- 6. Hours worked

The time sheet prepared using the given template should be named using the following naming convention.

For a group of three students with Roll Nos. 10, 25 and 105, there will be three timesheets prepared by each of the team members and each of them should submit to indicate their contribution to the project.

If the student Roll No. is 201911001, and it is the first (01) time-sheet submitted on 25th Feb (02), the file name should be **TS-01-2502-201911001.pdf**

If the student Roll No. is 201911001, and it is the second (02) time-sheet submitted on 04th Mar (03), the file name should be TS-02-0403-201911001.pdf

If the student Roll No. is 201911001, and it is the sixth (06) time-sheet submitted on 01st Apr (04), the file name should be **TS-06-0104-201911001.pdf**

Weekly Status Report

Submission: Weekly.

Date of Submission: Every Friday till End of Project. Mode of Preparation: Group, submission by team lead.

Submitted to: Upload to Google Classroom

The following details should be included in your Weekly Status Report (WSR)

- 1. Brief summary of work done during the week (member wise).
- 2. Time spent in the project during the week in hours (member wise).
- 3. Plan for next week (member wise).
- 4. Total time spent till now (in hours).
- 5. Estimated total remaining time (in hours).
- 6. Status with respect to the project management report (ahead of schedule/as-per-plan/slippage) and reasons, if delayed.
- 7. Problems faced related to the project, if any.

Above details should be submitted as a WSR document and its corresponding pdf file should be named using the following naming convention.

If group comprises of students with Roll Nos. 10, 25, and 105, and it is the first (01) WSR submitted on 25th Feb(02), the file name should be **WSR-01-2502-10-25-105.pdf**

Project Management Document

Updation and Submission: Bi-weekly.

Mode of Preparation: Group.

Submitted to: Upload to Google Classroom

This project management document (PMD) is the starting point for a member to know about all aspects of the project. It may not contain the details but tells you where to find any aspect of the project, what is project about, what are the components of the project, where to find them, who are the customer(s) etc.

- 1. Activity list (Estimate time for each activity. Mention probable dates.)
 - (a) Formulation of the problem
 - i. Reading relevant background information
 - ii. Understanding and documenting the requirements
 - iii. Discussions
 - (b) Designing a solution, documentation
 - (c) Relevant learning
 - (d) Coding and unit testing
 - (e) Documentation
 - (f) Testing
 - (g) Reviews
 - (h) Re-work and de-bugging
- 2. Project Plan: For each activity, your estimated start date, end date, responsible person(s).
- 3. Testing Strategy:
 - (a) For each requirement, test transactions, expected results
 - (b) Test cases for the design
 - (c) Test cases & expected results for integration
 - i. Module integration
 - ii. User Interface integration
 - (d) Test data, expected results for unit testing

For each of the above testing activities, the following should be clearly specified.

- (a) Schedule
- (b) Responsible person
- (c) Placement of test cases, test data & expected results (folder/files)
- 4. Any other special activities and an appropriate breakup with estimation, as recommended by the standard fixed.

If group comprises of students with Roll Nos. 10, 25, and 105, and it is the first version of PMD submitted on 15th April (04), the file name should be **PMD-01-1504-10-25-105.pdf**. The subsequent revised PMD after two weeks will be submitted on 29th April and therefore the file name of that document should be **PMD-02-2904-10-25-105.pdf**.